

1 **ABSTRACT OF THE DISCLOSURE**

2 In one aspect, the invention encompasses a semiconductor
3 processing method wherein a conductive copper-containing material is
4 formed over a semiconductive substrate and a second material is formed
5 proximate the conductive material. A barrier layer is formed between
6 the conductive material and the second material. The barrier layer
7 comprises a compound having silicon chemically bonded to both nitrogen
8 and an organic material. In another aspect, the invention encompasses
9 a composition of matter comprising silicon chemically bonded to both
10 nitrogen and an organic material. The nitrogen is not bonded to
11 carbon. In yet another aspect, the invention encompasses a
12 semiconductor processing method. A semiconductive substrate is
13 provided and a layer is formed over the semiconductive substrate. The
14 layer comprises a compound having silicon chemically bonded to both
15 nitrogen and an organic material.